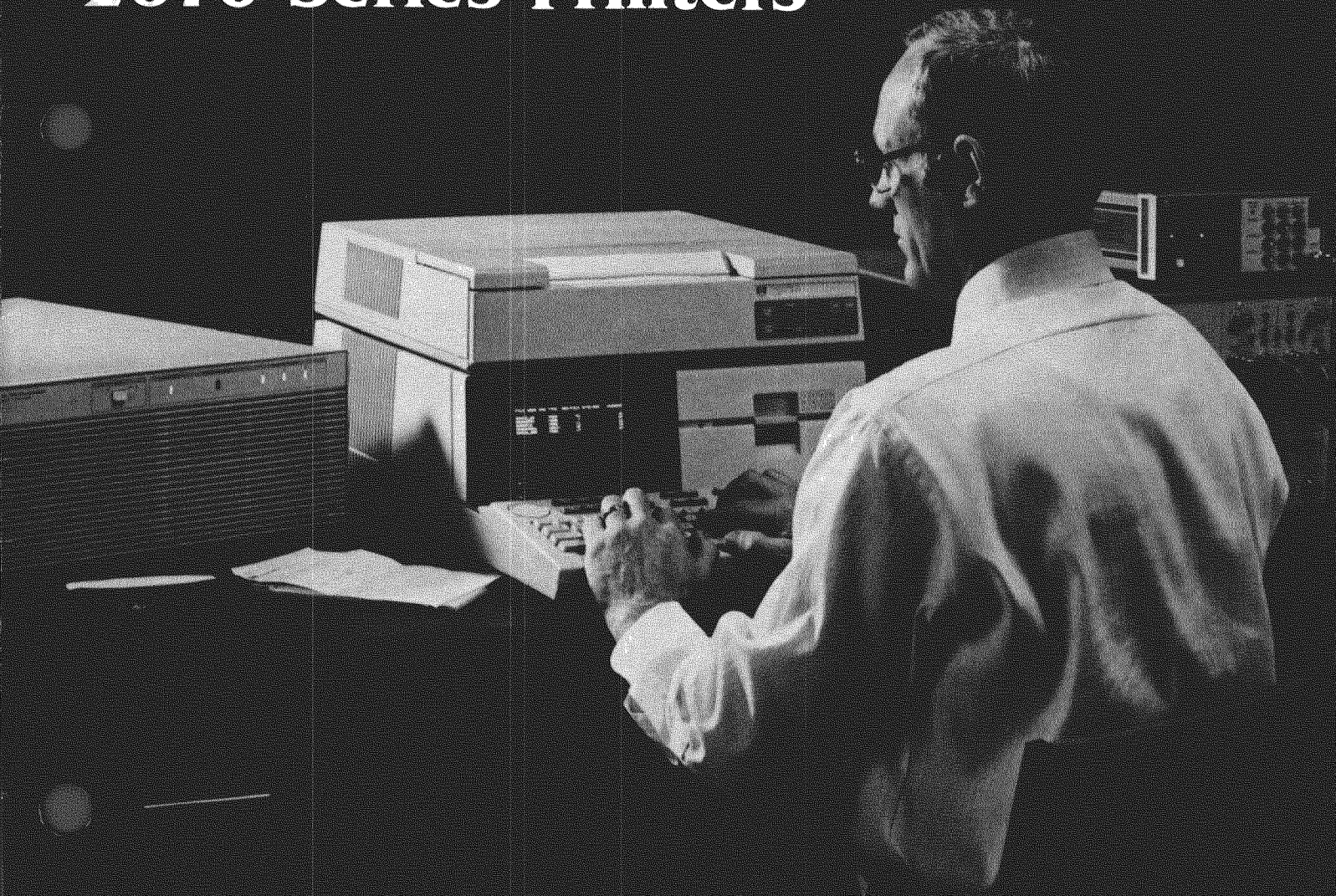


Computer News

For HP Field Personnel

June 1, 1981

Introducing the 9826A Desktop Computer and 2670 Series Printers



Computer News

June 1, 1981
Vol. 6, No. 14

On the Cover:

The new HP 9826 multi-language desktop computer system is 2-10 times as fast as previous HP desktops, and is designed to work with the new 2670 series printers from Vancouver division. See pages 12 and 21 for articles.

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HP Computer Museum

www.hpmuseum.net

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CMG

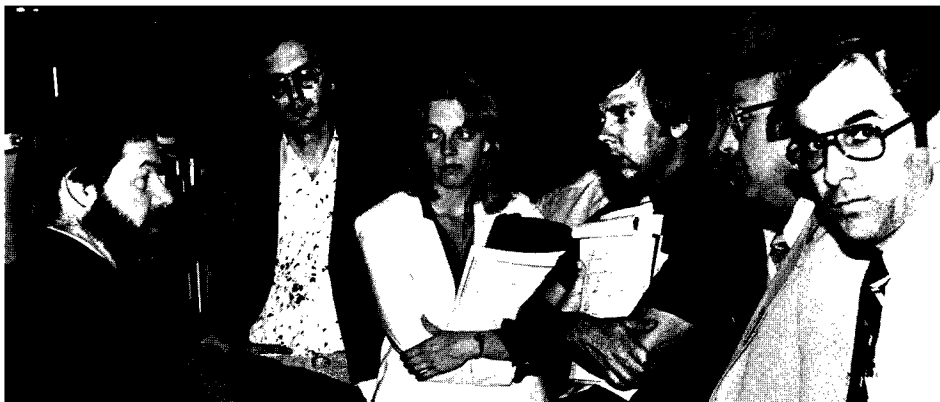
Senior Sales Seminar a Hit for "The Productivity Professionals"

By Jerry Gross & Phil Williams/DSD

About 150 sales representatives from US and ICON sales regions attended a Senior Sales Seminar in Cupertino & Ft. Collins, May 4-8.

Participants, divided evenly between commercial and technical sales forces, took part in overviews by BCG and TCG management teams and attended smaller sessions led by peripheral and systems division people. Future product and market strategy sessions emphasized how HP computer products are being focused to help customers improve product quality and increase productivity.

A key subject covered during the seminar was the Hewlett-Packard Manufacturers Productivity Network (HP-MPN), a new marketing concept to clearly position HP products and capabilities with major customers in the manufacturing market. As part of this strategic direction, HP sales reps were urged to view themselves as "The Productivity Professionals."



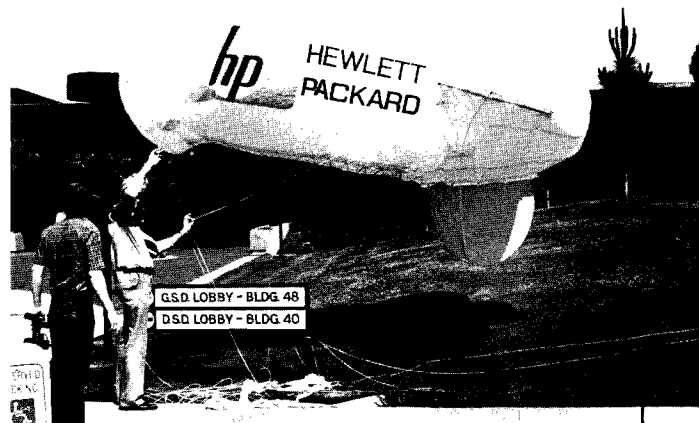
The seminar included a Product Faire at which HP people discussed several new capabilities that may soon be added to HP's product line.



... at least one sales rep obviously harbored fears he might lose his job to a machine.



TCG Marketing Manager Robert Ueltzen listened to the automated presentations of the talking robot.



Phil Williams, TCG Sales Training Manager, launched an HP blimp over the Cupertino site to begin the week's festivities.

Free Publicity For Your Manufacturing Customers

By Lee Bonds/CMG

HP's customers recently have been recognized in the pages of computer and industry magazines. Now we need more leads from your manufacturing customers. If you have a customer with a good story to tell on CAD/CAM, data acquisition, inventory control, process control, materials handling, simulation—even accounting, (if the company is a manufacturer)—help them get publicity in magazines like *Computerworld*, *Computing Canada*, *Production*, *Quality* and *American Machinist*. It's good PR for your customers and helps your HP success story reach a wide audience.

Special thanks to the following SRs (and DMs) for stories appearing on their customers in the last six month:

SR	Customer	Magazine	Date
Frank Mannersheid	Esmark	<i>Infosystems</i>	11/80
Bill Fox	Milo Beauty Supply	<i>ZIP Magazine</i>	2/81
Randy Foster	Bovaird	<i>Modern Office Procedures</i>	12/80
Tom Gulczynski	H.B. Zachary	<i>Computing Canada</i>	11/80
Sandy Effrion	Chase Manhattan Bank	<i>Bank Systems & Equipment</i>	1/81
Jim Freit	Univ. of Wash. Hospital	<i>Health Care Product News</i>	11/80
Gary Kirwan	Gulf Oil	<i>Plastics Design & Processing</i>	12/80
Dick Richardson	Pioneer	<i>Paperboard Packaging</i>	12/80
Mike Thack	Chardon Rubber	<i>Communications News</i>	3/81
Ben Clark	U.S.C.-I.S.S.	<i>Defense Electronics</i>	2/81
David Chamberlain	Canadian Govt. Supply Admin.	<i>Computing Canada</i>	11/80
Barry Pehoski	Grand Rapids Police	<i>MIS Week</i>	12/80
John Arseno	Cyborg	<i>Computer Decisions</i>	10/80
Todd Palmer	Baltimore Gas & Electric	<i>Transmission Distribution</i>	1/81
Wayne Diehl	Media General	<i>Computerworld</i>	2/81
Mike Kreuser	Perry Engineering	<i>Oil & Gas Journal & Machine Design</i>	11/80
Ron Guyote	Chevron	<i>Data Management</i>	11/80

In future issues of *Computer News*, we'll be providing you with details on current applications stories appearing in computer/electronics and trade magazines. These stories are good subjects for discussion with your customers.

To get publicity for your manufacturing customers, call Lee Bonds or Bob Ingols in CMG Public Relations (408) 996-9800 ext. 2285 or 2275.

June NPT

By Robin Leigh/CMG

Mark your calendars — June 8 will be the start of the U.S. and Canada Technical NPT. (No commercial NPT at this time.) DCD, DSD, and Roseville will be sending out teams to make 22 office stops and give 18 customer seminars.

This NPT will focus on a new line of Desktop Computer Systems and Peripherals, together with a Third Party Software Supplier program. Products included are the HP 9826, HP 9845 Model 200, HP 2671, and HP 1000 Model 5.

The customer seminar "New Technical Computers From Hewlett-Packard," will run from 8:30-noon on the second day. Check with your local coordinator for the dates of the NPT and seminar in your area.

Sales Financing

Sales Financing Sales Aids for the Sales Cycle

By Bill Vinnicombe/Corporate Sales Financing

As discussed in the May 1, '81 Sales Financing article, in *Computer News*, the key to the HP financial solution for potential customers is the positioning of acquisition alternatives early in the sales cycle.

To support this positioning, Sales Financing, with extensive input from Computer Systems SRs, DMs, field marketing managers, and group management, has designed and tested three sales aids. These sales aids will support the HP financial solution in a professional and systematic manner.

The first sales aid is the Financial Needs Analyzer. This sales aid has two distinct functions. First, to identify the customer's financial needs regarding equipment ownership, tax and financial reporting, and payment and term considerations. Based upon customer input, the best general category of lease plan can be identified (Finance Lease, True Lease, or

Installment Contract). The second function is to list the credit information required for most credit decisions.

The second sales aid is the Sales Finance Program Selector. From the general category of lease plan identified, this sales aid provides a matrix comparison of the lease programs within the category, based upon the customer's financial requirements and credit qualification. This sales aid also offers a matrix comparison of all the leasing programs HP offers.

The third sales aid is called the Sales Finance Presenter. This sales aid structures a cash flow analysis for any particular financial solution, whether HP or a competitor. This sales aid is most helpful in situations where the customer's financial decisions are quantitatively based.

With proper training and support, these sales aids offer an effective, systematic approach to the identification, selection and analysis of the HP financial solution best suited for the customer.

A training/reference handbook has been designed to explain each of the sales aids. Accompanying the handbook is an audio tape which illustrates the positioning and use of these sales aids in the sales cycle.

Additionally, a training program has been put together to introduce and support these sales aids on a decentralized (district) basis. This program is designed to enhance the SR's abilities to use the sales aids, particularly against competitors well versed in this approach.

Your local sales financing representative has all of the above materials. Currently, he/she is working with regional, area, and district management to schedule the implementation at the district level. However, if you have any questions, or would like to see the sales aids prior to your district introduction, do not hesitate to contact him.

CSD

Reorganization at CSD Sales Development

By Cheryl Gebru/CSD

There are two new additions to the CSD Sales Development team:

Steve Andersen joined the company in January after earning his BSEE from the South Dakota School of Mines and Technology. He will assume *Chris Kryzan's* responsibilities for supporting the Midwest Sales Region and Europe. *Chris* will now be responsible for Assigned Major Accounts.

Cheryl Gebru joined HP in February after earning an MBA at U.C. Berkeley. She will assume *Roger LeMay's* responsibilities for supporting the Neely Sales Region and Canada. *Roger* will now be responsible for supporting Assigned OEM's.

Tim Draper will retain support responsibilities for the Southern Sales Region and ICON/Latin America. *Kathy Humphrey* will continue to support the Eastern Sales Region and the remainder of ICON.

We hope you will join with us in welcoming both Steve and Cheryl.

Installation Management Consulting

By Debbie Sze/CSD

Several good questions about Installation Management Consulting for the HP 3000 were raised at the Senior Sales Rep Seminar in May. We'd like to share them with all Commercial SRs and SEs since they address fundamental strategic issues.

Q: Is there really a need for a product like Installation Management? Where did CSD get their inputs?

A: A number of customers, SRs and SEs have voiced a need for an efficient standard service that would get the customer's operational procedures started in the proper manner. A survey of existing start-up services showed that we could significantly increase the SEO's efficiency by providing the structure to set customer expectations early, by standardizing some forms and procedures and by defining the appropriate preparation on the customer's part. The customer manual that the SE personalizes to the customer's needs also saves substantial report writing time.

As to specific inputs, consulting products like Installation Management are reviewed by an experienced field project team, which tries to make sure that the product fits customer needs and is more valuable than existing services. You can contact any member of the Installation Management team (listed in the March Field Training "Memo") for more information about the process.

Q: Many areas currently offer an equivalent start-up service for new customers, usually in the form of two days set aside on an open P.O. of 5-10 days of consulting. Can SRs continue to sell the "old" service since it's \$200 cheaper?

A: No. If Installation Management Consulting is available in your area (check with your SE), then 35039A is the right product for your customers. First, the material is more comprehensive, and second, the service

can be delivered in *half* the time. This translates into a *savings* of \$400 when your customer buys one day of 35039A instead of two days of general purpose consulting, not an extra \$200 as it looks at first glance.

This cost savings is due to the increased productivity of both the customer and the SE. The *Quick Reference Operations Manual* for the customer covers every topic that should be included in such start-up assistance. Since it's designed for "quick reference," the customer need not worry that he understand every detail during the consulting, but can read the text afterwards. The SE, too, no longer needs to remember which topics should be covered and in which order; the manual can be used as a guide during the consultation so that the SE can concentrate more on the information than on the mechanics. As a result of this increased efficiency, two days of T & M consulting can usually be covered in one day of 35039A.

New Course Numbers for DCD Customer Courses

By Larry Johnson/CSD

Starting July 1, the customer courses for Desktop computers will have new product numbers, instead of part numbers. They will appear on the Corporate Price List and will use the same format as the rest of the Computer Groups' system courses.

Old Part Number	New Product Number		July 1 Price
09825-30010	98524A	9825 Operating and Programming	\$650
09825-30030	98525A	9825 I/O Programming	\$640
09835-30010	98508A	HP System 35 Operating and Programming	\$650
09835-30020	98509A	HP System 35 Assembly Language	\$800
09845-30001	98501A	HP Basic Programming	\$520
09845-30010	98502A	HP System 45 Operating and Programming	\$650
09845-30030	98503A	HP Basic Language I/O Programming	\$640
09845-30040	98504A	HP System 45 Image Data Base Management	\$800

The part numbers will be retained on the Parts Price List until September 1 to minimize confusion during the changeover.

The Fall issue (July—Dec) of the *Computer Systems North American Customer Training Schedules* will show the new product numbers.

Q: If we're trying to sell a solution to our customers, why does 35039A have a variable pricing structure at \$800 for the first day and \$600 for subsequent ones?

A: The extra \$200 for the first day includes the cost of materials and, more importantly, the cost of prep time. It represents the time the SE spends away from the customer site that is intrinsic to the service the customer receives. Our ultimate goal is to set a fixed price on this product in keeping with the philosophy of selling a solution. At this point, however, we just don't have the experience to determine what the average time for this product should be. Right now, 35039A is designed to be a one-day service, but Option 001 is a necessary mechanism to add more time for those customers who need it.

We hope this discussion will help you sell the "New Concept" of consulting to our customers. Like any new idea, it will take time to implement and we need your help.

Support as a Sales Asset

By Judy Hayner/CSD

In the March issue of ACCESS, a competitor evaluation system published by the Business Computer Group, support was shown to be extremely important in winning sales. In fact, for the large HP 3000s, the Series III and 44, support was shown to be the most significant factor in selling the customer on HP versus another vendor. As the ACCESS report states, these customers usually have a large user base and DP staff, and realize the importance of a reliable system backed by a quality support organization. Hewlett-Packard offers the excellent support they require. For the smaller HP 3000s, the Series 30 and 33, support showed up as the third most significant winning factor behind hardware capability/expansibility and applications software.

It is clear from the information, which was based on inputs from the Commercial Sales Force, that support can be used effectively as a sales asset. The ACCESS report indicates that support can be a particularly significant factor in successfully selling the HP 3000 against the IBM System 34, and in winning HP 250 sales. So don't forget support next time you're in a tough sales situation — it may clinch the sale! Let us know your support success stories and ways we might be able to help you.

TCG

Three New Ads for Technical Computers

By Orrin Mahoney/TCG Marketing

Three new HP ads, each targeted to a slightly different audience, are about to appear in various technical magazines. The Model 5, three-page introduction ad titled "Full System Support" (top right) is designed to continue the L-Series Microcomputer campaign aimed at OEMs. It will appear in *Computer Design*, *Mini-Micro Systems*, and *Computer Systems News* starting in June.

The technical graphics ad titled "HP Presents Graphic Improvements in Engineering Productivity" (center) is designed to present Hewlett-Packard's full range of software and hardware for graphics. It will run in computer pro books like *Datamation* and *Mini-Micro Systems* starting in June.

The desktop applications software ad titled "The Most Frustrating Part of Your Problem Has Already Been Solved" (bottom right) actually will be three slightly different ads tailored for electrical engineers, mechanical engineers, and scientists. It is designed to promote the desktop application software library and get leads for you. They will appear in late May in magazines like *Electronic Design*, *Machine Design* and *Science*.

There's more behind Hewlett-Packard's microcomputer than \$50 million worth of software.

Announcing the new HP 1000 L-Series Model 5 microsystem.

All strips attached.

The ins and outs of high-speed I/O.

Configure it our for yourself.

HEWLETT PACKARD

Full system support.

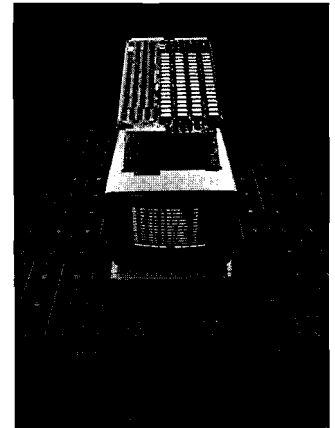
Announcing the new HP 1000 L-Series Model 5 microsystem.

All strips attached.

The ins and outs of high-speed I/O.

Configure it our for yourself.

HEWLETT PACKARD



HP presents graphic improvements in engineering productivity.

Peripheral vision.

The picture of productive systems.

HEWLETT PACKARD

Chances are, the most frustrating part of your engineering problem has already been solved.

Power and local control in one compact unit.

HEWLETT PACKARD

GRAPHICS/1000-II — The Way to Go!

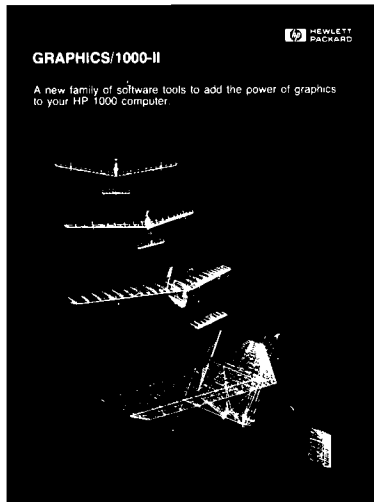
By Phil Walden/Technical Applications Program

GRAPHICS/1000-II is a new product family with over 2,000 potential customers at your doorstep!

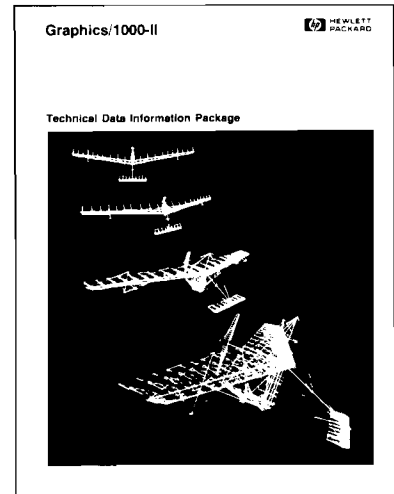
GRAPHICS/1000 Graphics Plotting Software (GPS) has over 2,000 installations, and all of them are potential GRAPHICS/1000-II customers.

GPS was bundled into every HP 1000 Model 45, and has had a respectable stand-alone sales rate over the last three years as well. So there are many GPS users who readily understand computer graphics and will quickly appreciate the better features of the GRAPHICS/1000-II family. Don't forget the 002 upgrade option for GPS users on support services. Over 35% of the incoming GRAPHICS/1000-II orders are GPS users taking advantage of the new graphics software. (See the May 15 *Computer News*, for more details on GPS conversions to GRAPHICS/1000-II.)

Furthermore, there is no need to sell GPS to new graphics customers! On a feature-for-feature comparison, the GRAPHICS/1000-II family products are superior in every way. GRAPHICS/1000-II also has a future while GPS is a mature product. Future graphics tools and applications will build upon GRAPHICS/1000-II. Enhancements and more device support will be continuously added to the family. If your customer wants to start software development now, and GRAPHICS/1000-II does not currently support his/her chosen peripheral, the device independent feature of GRAPHICS/1000-II saves the day! Device independence will allow your customer to start development on a currently supported peripheral and switch to the preferred peripheral later, when it becomes supported. If you have questions about when a particular device will be supported, consult your DSD sales development person.



GRAPHICS/1000-II Brochure



GRAPHICS/1000-II Technical Data Information Package

New GRAPHICS/1000-II Brochure

By Phil Walden/Technical Applications Program

Next time you head out on your rounds, make sure you have your new GRAPHICS/1000-II brochure. The brochure describes the entire GRAPHICS/1000-II family, both the Device-independent Graphics Library (DGL), and the fantastic Advanced Graphics Package — 3D (AGP-3), and has many application photos.

If your customers have a more detailed interest, let them see the

GRAPHICS/1000-II Technical Data Information Package also. It's full of technical details about features, configurations, and device support.

Make sure your office is well stocked: GRAPHICS/1000-II Brochure (P/N 5953-4271), GRAPHICS/1000-II Technical Data Information Package (P/N 5953-4275).



DSD

"Computers in Manufacturing" Forum Draws Enthusiastic Response

By Carlos Avila/DSD

Thirty-three executives representing 16 companies attended our latest Executive Forum, "Computers in Manufacturing," held in Cupertino from April 27-29. Not only was this our largest group, it also contained the highest number of upper level management we have ever had (nine Vice Presidents, eight Directors).

The companies represented are listed below:

AMP	Firestone
Applied Materials	Ford
Atlantic Research	Rapicom
Dupont	Lockheed
Eastman-Kodak	Scientific Atlanta
Electronic	Singer-Kearfott
Memories &	Synertek
Magnetics	U.S. Steel
Fairchild	Varian

Gaylan Larson, DSD general manager, discussed HP's commitment to the manufacturing industry. His talk was followed by a broad range of topics and factory tours demonstrating how HP has applied computer technology to solve manufacturing problems. Among the topics covered were:

- Computer Integrated Manufacturing: Trends for the Eighties
- Improved inventory tracking through on-line factory data collection
- Review of data capture terminals
- Shrinking rejects and growing productivity at HP
- Computer Technology: Directions for the Eighties
- Trends in Industrial Automation
- Computerized Automated Material Handling
- Tour of Sunnyvale printed circuit board manufacturing facility



Patty Einerson shows Ford attendees a DATACAP/1000 transaction at the CSD board repair center.

- Improving engineering productivity using technical computers
- Manufacturing Applications Technology: Directions for the Eighties
- Manufacturing applications demonstrations

Materials/Management/3000

Production Management/3000

- The evolution of distributed data processing at HP
- Data Communications Technology.

Dick Anderson, BCG Computer Systems general manager, concluded the seminar with a discussion of the



Margo Hammell and Dick Knudtsen have the attendees on the edge of their seats with their MM/3000 presentation.

Japanese challenge to American Industry. Dick discussed his recent trip to Japan where he saw firsthand how the Japanese stress quality and productivity. Dick's message to the audience was clear: American industry will have to automate and use computer technology to remain competitive (and we are just the right company to help them do that!)

We learned two things from this last seminar: first, our sales organization is doing an increasingly better job of penetrating the upper level management of these prospective customers. Second, there is an obvious demand for this type of seminar. Our goal will be to conduct this seminar at least three times per year.

Mag Tape Support on the L-Series

By Gary Law/DSD & Tom Mills/Boise

Beginning July 1st the HP 1000 L-Series microcomputers and microsystems will support the HP 7970E 1600 bpi mag tape unit. The 7970E provides backup storage for the L-Series systems and software transport to and from larger 1000s. At this time there are no supported utilities for the mag tape. However, modified versions of the RTE-IVB utilities READT and WRITET will be available to run under RTE-XL only for customers who would like them. Consult your local SEO to get these utilities for your customers. FCC and VDE approvals for the mag tape on L-Series systems are pending, and the results will be made available.

Orders for mag tape units on L-Series systems will be accepted as of May 1st for July or later shipments. Remember, when ordering the 7970E for the L-Series, also order option 426, the magnetic tape HP-IB subsystem. More information on the mag tape unit can be found in the new HP 1000 Computer Systems Peripheral Selection Guide, (P/N 5953-4283 22).

2622A Now Supported on Model 5

By Gary Law/DSD

The new 2622A is now supported on the HP 1000 Model 5. The 2622A offers capabilities between the 2621A character mode terminal and the 2624A editing display station, making it an ideal terminal for the Model 5 in applications where the 2621A doesn't have enough functionality, but the 2624A is more than your user needs. The 2622A features:

- Forms mode
- Screen-labeled softkeys
- Display enhancements
- Optional line-drawing set

Remember, when ordering terminals for the Model 5, be sure to order option 090 to remove the pedestal base for use with the Model 5. For more information on the 2622A, contact your DTD sales development engineer.

New ATS/1000 Configuration Guide

By Dawson Mabey/DSD

The ATS/1000 Configuration Guide has been reprinted to include the latest additions to the list of standard devices. There are now over 75 standard instruments in ATS/1000! This new guide (P/N 5953-4297D — dated 5/81) is now being distributed to your office and replaces the old guide (dated 2/80) effective June 1 '81.

In addition to incorporating the latest instruments, the new guide reflects minor increases in the number of engineering units required per device and incorporates the price changes that occurred March 1. All quotations made after May 30 should reflect these new prices. Existing quotations using the older numbers will be honored until expiration. Orders received before July 1 will also be accepted using the old prices.

Call your DSD Sales Development engineer if you have any questions.

HP & The L-Series ... The Industrial Automaters

By John C. Boyle/DSD

Thanks to the HP 1000 "XL" and a solid HP team effort, we have recently logged our largest L-Series sale yet — after competition between an Intel microprocessor and an HP microcomputer.

The application is for a company in an extremely competitive industry, and because of this, has asked to remain anonymous. We'll call it Automated Inc.

The Application

Automated Inc. has over 200 milling stations at which their products are measured and milled to their proper dimensions. In the past, these stations were controlled in groups of eight by HP 1000 "E" systems. Due to competitive requirements, Automated found themselves faced with increased requirements for production precision and reporting data.

The Solution

Off-load the "E" series by adding an intelligent controller to each milling station and have these "boxes" perform, monitor and control work, and pass production data to the "E". Now, not only can more tests be added to each station, but Automated can reap the benefits of Distributed Processing! And the eight stations aren't lost if the "E" should stop working.

The Problem

Automated had two factions within their engineering department: one which wanted to go with HP's microcomputer and another which wanted to use an Intel 8085 microprocessor. Automated's management decided to proceed with two simultaneous project efforts with a "winner-take-all" decision to be made in eight months.

The Race

Despite a six-month head start that Intel had due to the delayed release of the L-Series M&C cards, HP swept rapidly into the lead. In fact, after only four weeks of development by HP, the Intel faction conceded.

Four weeks later when Automated's management made its review, the decision was obvious: go with HP's "XL" with 128KB of memory (with option H01 which was created to produce an affordable, supportable, 16 slot, BOX LEVEL microcomputer), a 12063A digital I/O, a 12060A A/D, a 12061A A/D mux, a 12013A battery back-up, a 12040A serial mux for various RS232 devices, and a couple of 12005A asynchronous serial interfaces for communication to the "E".

The Results

Automated has already purchased approximately 40 of these configurations with plans for eventual implementation of more than 100. This application serves as a solid example of HP's automation capabilities and contains some valuable insights for selling to this market.

The facts which our customer said affected their choice between the Intel microprocessor and the HP microcomputer were:

HP Microcomputer

pluses ...

- ease of I/O programming allowed success of project in limited time
- operating system is coded efficiently. Fast interrupt handling ... "excellent code"
- manuals are clear and easy to follow
- large memory growth path
- DMA per card
- high temperature spec and gold plating

- ease of programming (all cards)
- SUPPORT ... Automated said that this factor was *the* primary reason that HP was selected.

concerns ...

- no 14 bit resolution or programmable offset on A/D
- no digital to analog converter (Roseville will introduce this summer)
- no edge connectors, cables, or screw terminations supplied with cards (specials can supply these).

INTEL Microprocessor

pluses ...

- A/D, digital I/O cards supplied by many sources (not tied to Intel only)
- 12, 14, or 16 bit A/D's available
- can have eight processors sharing bus
- can have processor, A/D, 16KB, DMA, RS232 port, and 16KB prom on one card.
- multibus backplane
- can have 16KB memory with dual port so processor CPU and card CPU can share it
- systems houses easy to come by
- much contributed software
- high speed floating point hardware
- parallel processing

concerns ...

- operating system not as strong as RTE-XL
- no hardware maintenance contracts ... must send in boards
- *Software development not as easy as on 1000 XL*
- 8 bit processor
- communication between 1000 "E" and Intel difficult
- *No S.E. support*

These are the kinds of factors which any manufacturer will face in his decisions on automation. Although a feature-by-feature list as above may appear unconvincing, the HP solution becomes the obvious choice when you and your customer look at the "whole picture". By focusing on the overall implications of long-term issues such as support, quality, and software development costs, the L-Series microcomputer and HP become the clear choice for industrial automation.

HP 1000 Demos

By Wayne Asp/DSD

The following list of customer demos are presently available from DSD: (For details and documentation on each of the demos, ask your SE for the SE Note listed).

See SE Note:

Data Cap Demo for E Series	2
Data Cap Demo for F Series	2
1979 NPT Demos	2
L-Series Demo	2
Pascal Demo	2
XL-Series Demo	10
GRAPHICS/1000-II Demo	11

Please note that the ordering procedures are also detailed in SE Note 2. The XL Demo and the GRAPHICS/1000-II Demo have just recently become available.

There is also a videotape presentation available from Corporate for DS/1000-IV, (P/N 90215RZ); order from Video Products, 95, Division 0700, Palo Alto. The presentation includes a 16-minute demo of DS/1000-IV.

Demos for Datacap/1000-II and DS/1000-IV are currently being planned. They will be announced in Computer News when they become available.

DCD

Announcing Two Major Power Tools: 9826A and 9845 Model 200

By Mike Forman & Rick Scherer/DCD

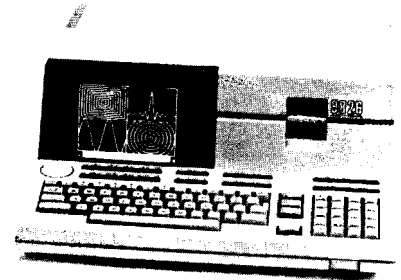
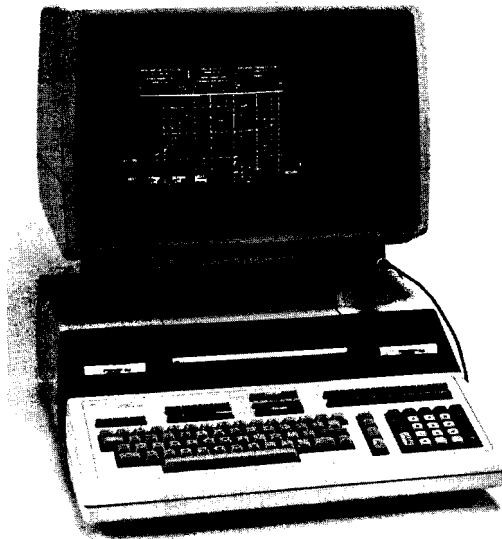
This month DCD is announcing two major computing products for engineering professionals. The HP 9826A Computer System extends the feature set that has made the HP 9825 the standard of the industry for HP-IB control. The HP 9845 Model 200 becomes the top-of-the-line graphics computer for computer-aided engineering, with improved computational and graphics performance.

The new 9826A Computer System puts a powerful computer at the engineering professional's fingertips. It is a power tool for computer-aided test applications.

With a state-of-the-art processor (Motorola MC68000), built-in HP-IB and data display graphics, the 9826 takes its place as the premier controller of the '80s. It embodies the 9825's HP-IB control features: powerful I/O language, high speed, transactional I/O and compact size, all at reasonable cost. The addition of a CRT with graphics and full-screen editor, a 5-1/4" mini-flexible disc drive, real time clock and the "knob" further enhance the system's usefulness.

The 9826 features another first for desktop computers — multiple high-level languages. BASIC provides structure and I/O capabilities beyond any previous version of the language; for example, IF ... THEN ... ELSE ... END IF is a standard part of the language. Labeled common blocks (like FORTRAN), optional pass parameters in subroutines and unified I/O are other key language features.

The 9826 HPL is fully compatible with 9825T HPL. It also adds graphics, access to the large memory, the "knob" and a real-time clock. The software investment of the 27,000 happy 9825 customers is protected.



Unprecedented Desktop Computer Power and Speed: New HP 9826A and 9845B Model 200

Pascal will be introduced late this year. Because it is a compiled language, its speed is enhanced considerably. Of course, all the structure provided by Pascal is retained, making Pascal programs largely self-documenting.

Standard memory is 64K bytes, expandable to 512K bytes. HP-IB, GPIO, BCD and serial interface cards are offered in addition to the built-in HP-IB port.

New product training was conducted in Europe and Japan in May. NPT for North America will begin June 8. The 9826 is on the June 1 Corporate Price List.

DCD is providing a line of enhancements to the top-revenue-producing 9845B by introducing a new "top" and a new "bottom". The top is a high-performance monochromatic display with many of the 9845C's fea-

tures, including soft keys, area fill, simultaneous alpha and graphics and an optional light pen. It is much faster than the current 9845B CRT, especially in drawing arcs and circles.

The bottom includes a new bit-slice processor that replaces the Language Processing Unit (LPU), with a speed three times that of the standard 9845 in computational programs. In some cases, the improvement can be as much as ten times. The new processor is also available on the 9845C.

All versions of the 45B and C will now be referred to as models for promotional purposes, although they are to be ordered as system options. The models you have been selling up to now become part of the Model 100 series. The new versions are the Model 200 series. The table below summarizes the new and old product structure:

	Standard Display	Enhanced Display	Color Display
Standard Processor	9845B Model 100		9845C Model 100
Faster Processor		0945B Model 200	9845C Model 200

These models are the minimum configurations; that is, they do not include printers, second tape drive, extra memory or a light pen. Other system configurations are designated by higher model numbers. The standard configuration (the T version) is always obtained by adding 50 to the above model numbers. And the expanded (maxi) systems are obtained by adding 90 to the model numbers.

Two new graphics systems are also being introduced: the 9845B Model 270 and the 9845C Model 270. Each has 318 Kbytes of user R/W memory, printer, second tape drive, light pen, and the I/O, mass storage, advanced programming and structured programming ROMs. Also included is a set of Graphics Utilities and a System Manual to help the user integrate the required input, output and storage devices. These systems are intended to make visible DCD's position in the graphics design market.

All models of the 9845 must be ordered as options. For example, a standard 9845C should be ordered as a 9845C with Option 150.

To help you handle your current orders, here is the correspondence between old and new names for the current products:

9845 Designation Cross-Reference

Old	New
9845B	9845B Opt. 100
9845T	9845B Opt. 150
9845B Opt. 190	9845B Opt. 190
9845C Opt. 001	9845C Opt. 100
9845C	9845C Opt. 150

Please refer to the Corporate Price List for the prices and to the data sheet for a complete description of each of the system options.

Distributed Systems Networking for HP 9835 & 9845

By Terry Anna/DCD

The HP DS/35 and DS/45 data communications software packages provide distributed systems networking capabilities to link HP 9835 and HP 9845 desktop computers with appropriately-configured HP 1000 or HP 3000 computers in DS/1000-IV or DS/3000 networks.

The new DSN systems provide six major features:

- DS/1000-IV and DS/3000 connections.
- Remote-command processing, allowing execution of HP 1000 and HP 3000 system commands.
- Easy-to-use remote-file transfer.
- High-speed transfer with full data integrity.
- Procedure files to automate execution of DS commands and to enable unattended operation.
- Optional auto-dial.

As part of a DS/1000-IV network, the desktops will have limited, remote interactive RTE command and high-speed, data-file transfer capabilities to or from HP 1000 computer systems. Similarly, with HP 3000 systems, the desktops will have remote command execution and high-speed file transfer capabilities. Pass-through is supported in the DS/3000 network. However, Store and Forward is not supported in the DS/1000-IV network.

Your best prospects for the new software should be engineers with requirements for local computation and graphics, and a need to access an HP 1000 or HP 3000 for central data

storage and retrieval. Another prospect type is the customer with a decentralized operation and dispersed departments, who has a central office with an HP 1000 or HP 3000.

The US price for either DS/35 or DS/45 software is \$500. The customer must also order an HP 98046B Intelligent Serial Interface card for \$1,000, and both Basic and RJE Bisync Data-communications ROMs for \$525 each. The optional HP 98036A Serial Interface card, needed to add auto-dial capabilities, is \$735. Delivery is estimated at eight weeks ARO.

Another Award for IMAGE

By Pat Hafford/DCD

IMAGE/45 has gathered more awards to add to its collection! The Rocky Mountain Chapter of the Society for Technical Communication (a national organization) gave the following awards in its 1980 competition:

First Prize: QUERY/45 User's Guide
Second Prize: IMAGE/45 Programming Manual Data Base Design Kit

What does this mean to your customers? They get not only a highly-rated data base management system, but highly-rated manuals as well. These manuals are clear and easy to use, and can help everyone — from beginner to expert — effectively use the IMAGE/45 and QUERY/45 data base management systems. Calm the fears of even the nervous novice by letting him/her know that the manuals will enhance the use of this powerful system.

BCG

Access Quarterly Update — A Big Success!

by Kathryn Hoshor/Business Computer Marketing

The results are in and it looks like the ACCESS Quarterly Update has emerged a clear winner! The first issue, published in March, was a tremendous success. Since the Quarterly Update was distributed to the field there has been a significant increase in the number of ACCESS Sales Situation Report forms received by the factory. In addition, we've heard a lot of positive feedback from the field. Here are just a few of your comments:

"Super idea."

"Did a good job of addressing our primary competitors."

"Appreciate the candor in discussing strengths and weaknesses of both HP and competitors — keep it up."

"This is the first useable competitive information that I have seen from HP . . . I am going to refer to this information on a regular basis."

"Easy to read. I was able to get to a lot of useful information very quickly, without sorting through non-helpful 'filler'."

"The ACCESS Update is the *most valuable* piece of marketing support data we've received in the field in quite a while!"

Additional feedback is always useful, so if you have some other comments or suggestions, let us know! Our goal is to make ACCESS a highly useful field sales tool and this is your opportunity to have an input and affect the end result.

We would like to thank those of you who have conscientiously filled out and sent in the ACCESS Sales Situation Report forms during the last five months. If you did not receive the March ACCESS report, let us know and we'll add you to our mailing list.

DCO

New Edition of Data Communications Handbook

By Bob Mayer/DCO

The "HP 3000 Computer Systems Communications Handbook," (P/N 30000-90105), third edition, April '81, will be distributed to all update service subscribers.

Every sub-system section has been revised:

- Error codes and messages have been updated.
- Communication line opening parameters have been added.
- System failure codes and where they occur in each subsystem and CS, have been added.
- Any updated configuration file formats have been described.
- New and revised console operator commands, such as DSCONTROL, have been described.

Some specific changes in sections are:

- New information on ADCC, INP, HP262X and HP307X terminal cabling and strapping, HP modems, and selected HP 1640 A/B settings has been added to "Controllers and Modems."
- Protocol descriptions now include the DS/3000 and MRJE/3000 block formats, and more information on multipoint protocol.
- A summary of JES2 commands, useful for RJE/3000 and MRJE/3000, has been added to the RJE/3000 section.
- MRJE/3000 pseudo-device configuration data has been included.
- More information on MTS/3000 terminals has been added.
- Network file transfer information, DSCOPY, has been added.
- MPTEST instructions have been included.

- Some changes that have taken place in the CS section are that:
 - The explanation of CSDUMP use has been made more complete.
 - Trace entry descriptions have been revised.
 - The CLINE, CRESET, and SHOWCOM commands have been explained.
 - A brief explanation of CS procedures, parameters, and returned condition codes has been included.
 - MPE file system error codes and messages have been included.
 - Instructions for an INP dump have been included.
- A section on MIL/3000 has replaced the section on the HP 2026. This new section includes IML/3000 requirements, intrinsics, using IDF, managing IML/3000, and other helps.

Terminal To Computer Survey

By Steve Engstrom/DCO

Many thanks to those of you who filled out and returned the survey we sent out recently. Over 600 surveys were received and put into a data base from which statistics and comments were summarized. This summary was sent to every management level within DTD and DCO, as well as to individuals located in Vancouver, RVD, GSD, and Pinewood. The results held some "I told you so" answers and some that were a surprise. The information gathered will certainly affect the direction in some of our products in the next few years.

And who won the HP 41C? Congratulations go to Neal Elgersma Jr. of the Grand Rapids office. Again, thanks to all for taking the time to return the survey.

ISD

The Steel Deal

By Bob Korn/ISD

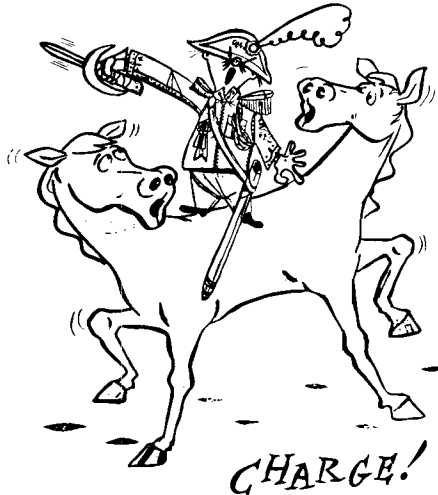
Skip Damon, Pittsburgh Commercial Sales Representative, has closed a multi-million dollar contract with United States Steel. US Steel has its corporate headquarters in Pittsburgh where Skip has been servicing its technical and commercial needs for the past three years. HP will be delivering 13 HP 3000 Series III systems over the next 18 months to be installed in 11 plant sites throughout the US.

The application, called Maintenance Information Management Systems, is being developed in Pittsburgh by a team from USS headquarters industrial engineering. It consists of several modules, including: spare parts control; failure reporting; planned maintenance; and an historical reporting system.

The 13 systems include an HP 3000 Series III with 1.5 megabytes of memory; four HP 7925 discs; two HP 7970E tape drives and an HP 2608 printer.

Congratulations to Skip and other SRs in the Midwest, who are having a successful year selling HP 3000 hardware and software.

GSD



Top HP 250 Charger

By Jerry Klemushin/GSD

Congratulations to Dennis Jones, GSD's top producing North American Small Computer OEM Specialist for April! Dennis has a medical OEM that brought in a total of seven HP 250 orders last month!

Several other HP 250 Specialists have OEMs who entered orders in April: Phil Skraba from Englewood, Peter Procino from Manhattan, and Peter Hupp from Paramus. Another stand-out performance is Canada's Dartmouth office. Its OEM placed five orders. ICON continued strong with 13 orders!

In every large city, there are literally thousands of firms with fewer than 100 people and between \$1 and \$10 million in annual sales that need a small business computer. Let's see those OEMs in *all regions* take advantage of the trend to go from *manual* to computer!



GSD's new small computer OEM specialists

Meet Your New Division Marketing Representatives

By Jerry Klemushin/GSD

Join GSD in welcoming two new division marketing representatives! Mary Etta Port and Hal Elgie will be responsible for on-line sales support of GSD's new Small Computer OEM Specialists as well as anyone else who sees \$\$ potential in HP 250 systems.

Mary Etta Port started her career with HP six years ago after graduating from Purdue University. She has designed management training courses, managed different departments in personnel and set up the division's distributed employee data base. Mary Etta brings a wealth of HP knowledge and enthusiasm to the Eastern Region.

Hal Elgie enthusiastically supports the Neely Sales Region. He is a graduate of Stanford University and comes to us with experience as a marketing representative from a microcomputer software house.

DTD

Users' Rating of Alphanumeric Display Terminals

By Jeff Cox/DTD

Summary of Datapro's
User's Rating of Alphanumeric Display Terminal

	Overall Perfor- mance	Ease of Opera- tion	Display Clarity	Keyboard Feel & Usability	Hardware Reliability	Main- tenance Service	Software & Technical Support
ADDS	3.3	3.5	3.3	2.5	3.5	3	3
BEEHIVE	3.5	2.7	3.3	3.5	2.7	—	—
DEC	3.8	3.5	3.7	3.7	3.7	2.8	3.5
IBM	3.6	3.3	3.3	3.2	3.4	3.3	3.0
TEKTRONIX	3.8	3.6	4.0	3.6	3.8	3.6	3.6
HEALTH (ZENITH)	3.3	3.0	3.0	2.7	3.7	3.7	3.7
HEWLETT- PACKARD	4.0	3.8	3.9	3.9	3.8	3.8	3.6

Once again *Datapro's* users' rating have given the Hewlett Packard terminal family its highest ratings. *Datapro's* April '81 Feature Report, "All About Alphanumeric Display Terminals," sampled user reaction in seven areas: overall performance, ease of operation, display clarity, keyboard feel/usability, hardware reliability, maintenance support, and software/technical support. HP's terminal family received the highest rating in five of the seven categories and second highest in the two remaining categories.

The *Datapro* report is oriented towards terminal users to help them

become familiar with terminal features and advantages. This report is subdivided into sections that discuss ergonomics, display media, marketplace and features. Plus the report contains a comparison of over 250 different products from 80 different vendors.

This report is kept in the DTD competitive library along with reports from other industry research organizations. These reports allow DTD to keep abreast of the terminal marketplace and our competitors. If you have any question about a particular vendor or application, please contact DTD Sales Development.

The 13265 Modem

By Andy Zaremba/DTD

One of the advantages Hewlett-Packard can offer to its customers is the ability to provide a one vendor solution to a wide range of customer problems. As part of HP's solutions, don't forget the HP 13265A 300 baud full-duplex modem which allows full HP support from our terminals to the phone system. All 262X terminals interface directly to the 13265A.

Via the 50-pin connector which provides not only communication lines, but also electrical power for the modem. The 2642A also supports the modem and, in addition, is able to use its autodial capability through the 13265A. If interfacing to 264X terminals other than the 2642A is desired contact Sales Development for details.

The modem is attractively priced at only \$1.25 per baud (or \$375). This compares with a comparable product from DEC, the DF02, which is priced at \$450 in single units.

HP 2649M Enhanced Display Station

By Chip Norris/DTD

Data Terminals now has an OEM version of the HP 2642A enhanced display terminal, the HP 2649M. The HP 2649M terminal offers the OEM a sophisticated display station which provides a substantial off-line capability.

Like the HP 2642A, the HP 2649M offers flexible, mini disc support, enhanced text editing and simplified forms design. With these standard features and the "added value" of software by OEM, the HP 2649M is an outstanding HP solution in data entry and text preparation.

Interfacing the HP 2622A to the HP 1000

By Kalli Louis/DTD

To interface the new HP 2622A display terminal to the HP 1000 using the 12966A interface card, it is necessary to modify the 12966A-60010 cable. This is because the HP 2622A does not have an external clock.

Therefore, you must change the interface cable (12966-60010) to hook the 2622A to the 1000 system. Table 4.1 and Figure 4.1 (HP 12966A *Installation, Service, and Reference Manual*, p. 4-2) show how to make the proper connections to match the baud rate.

2642A Mini-Disc Back-up

By Peter Taylor/DTD

When selling the HP 2642A terminal for applications where the data is critical or where the terminal is in a stand-alone environment, it is strongly advised that the customer purchase a dual drive terminal. Two drives make it possible to produce back-up copies of important data. For applications which are primarily on-line, back-up can be provided by system storage.

For those customers who have already purchased single drive 2642As, the 13272S accessory provides the means to upgrade their terminal to dual drives.

A Sales Rep Setup Guide

By Russ McBrien/DTD

Here's a step-by-step way to set up your HP 2642A and HP 2601 printer for a demo.

Equipment needed:

HP 2642A	Terminal
HP 13250	Data Comm. Interface
HP 13232G	Printer Cable
HP 2601	Printer

Step 1: Open the terminal and prepare it by setting all the straps on the keyboard interface to *open*, especially the G and H straps. (Note: Be sure that the power is turned off before opening the terminal.)

Step 2: Prepare the 13250 interface board. First set all the straps to *open*. Then set to *closed* the following straps:

FC7	FC2	CBE
FC6	FC1	A11
FC5	FC0	A9

Step 3: Insert the 13250 interface into any free option slot and then attach the 13232G cable to the interface and the printer.

Step 4: Open the printer by pulling the front cover forward and slightly upwards. Inside you'll see two dials and two banks of switches.

Step 5: Use the first dial to select the proper print wheel style you are using; usually two for a metal wheel and seven for a plastic wheel. The second dial is usually set to two.

Step 6: The switches are next. First open them all by pushing or pulling them towards the front of the printer. Next, close the switch marked "paper out defeat."

Step 7: Power on and you are ready to print.

If you have any questions, remember we are here to help.

Literature News

By Steve Butler/DTD

In addition to the data sheets for the HP 2649 OEM family, we now have a data sheet available for the HP 2629 OEM family (595-2062 42 D).

The data sheet incorporates the entire 2629 terminal line, giving a good overview of each product. In fact, whether you are selling into an OEM or End User environment, you will find that the data sheet can help you select the most appropriate 262X terminal for your customers' needs.

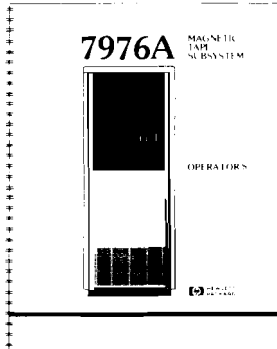
New DTD Sales Guide

By Eric Grandjean/DTD

It's yellow and it's dated May 1! A new revision of the DTD Sales Guide is being distributed to all SRs and SEs whose name is in the corporate MAILS II data base.

This informal guide has a comprehensive list of terminal type equipment from six different divisions, which have been tested and proven to work together. Options which are not applicable or have not been tested have been omitted. The guide also contains related documentation part and publication numbers, discount policies and your factory contracts. If you have any comments or suggestions about the guide, please call me.

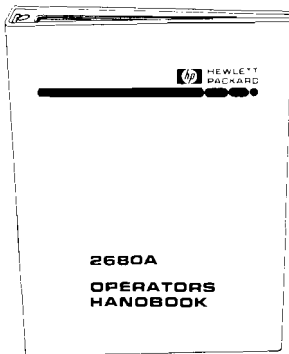
BSE



HP 7976A Operator's Manual Arrives

By Linda Crozier/BSE

Boise Division's Marketing Communications department recently completed the *HP 7976A Operator's Manual* (P/N 07976-90901), and the *2680A Operator's Handbook* (P/N 02682-90901). These manuals are included with each tape drive and page printer shipped. Additional copies may be ordered directly from Computer Supplies Operation.



European Translations for the 2680 LPS Brochure

By Sue Brault/BSE

Geoff Kirk of BCG MARCOM (Boebingen) is in the process of translating the *2680 LPS Brochure* for foreign distribution.

The brochure is nearing completion, so watch for the foreign version to be distributed to your area soon.

DMD

Environmental Testing — Part IV Power Line Transients

By Michael Rusnack/DMD

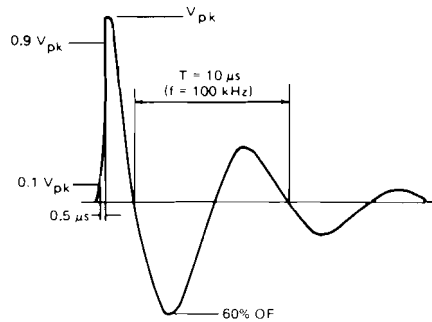
An environmental parameter that is often overlooked is the AC power that is supplied at the wall outlet. Twenty-five percent of field repairs on disc drives have been associated with possible power-related circumstances, with at least five percent being directly attributable to power problems. "Power problems" can be divided into two general categories: (1) line voltage/frequency fluctua-

tions, and (2) high voltage noise 'spikes' on the power lines.

Line Voltage/Frequency Fluctuations:

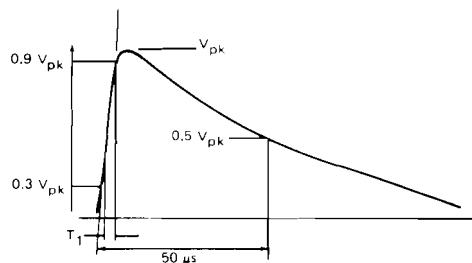
Irregularities of the line voltage/frequency commonly fall into the following categories:

- **Line Dropout** — The voltage may be lost for a few milliseconds up to several minutes,
- **Surges and sags** — Momentary fluctuations from the nominal line voltage are experienced as a result of equipment being turned on or off within the immediate vicinity or anywhere over the entire power distribution network,



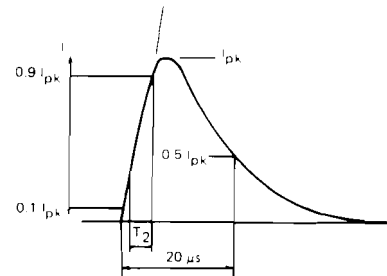
OSCILLATORY WAVE 0.5 μ s RISE TIME, 100 kHz DECAYING AT 40% FOR EACH SUCCESSIVE PEAK

A. RING WAVE (0.5 μ s - 100 kHz) OPEN CIRCUIT VOLTAGE



$$T_1 \times 1.67 = 1.2 \mu s$$

1.2 μ s \times 50 μ s
OPEN CIRCUIT VOLTAGE



$$T_2 \times 1.25 = 1 \mu s$$

1 μ s \times 20 μ s
DISCHARGE CURRENT

B. UNIDIRECTIONAL WAVES

- **Brown-out** — Long-term voltage sag as a result of excessive demand being placed on the power distribution network, and
- **Harmonic Distortion** — This is an undesirable change in the original signal (sine) waveform which results in an unfaithful representation of the desired waveform.

High Voltage Noise Spikes:

Power line spikes or transients have been observed to range up to thousands of volts and amperes. Designers as well as installers of electronic equipment should be aware of the following new high voltage waveforms recently defined by IEEE: (a) an exponentially-damped 100KHz cosine known as a "ring wave", and (b) an unidirectional, or double exponential impulse. The ring and unidirectional waves are shown in Figures A and B, respectively. The two main causes of high voltage transients are:

- **Lightning-induced potentials** — Electronic equipment can be damaged by lightning strikes occurring miles away. The sudden redistribution of charge can cause significant electromagnetic fields over a large area, and
- **Back EMFS** (electromagnetic force) due to switching large inductive loads — When an inductor's current is interrupted, a back EMF is generated that equals $L \, di/dt$ or, inductance times the rate of change of current. For example, a 110V relay with an unprotected coil can generate transients equal to thousands of volts on the AC line.

Power line conditioners may be helpful in regulating and conditioning (removing transients from) the AC power source. Problems associated with power line irregularities are often very difficult to diagnose due to the unpredictable and intermittent nature of the problem. When power problems are suspected, a power line monitor must be installed to detect and record any anomalies.

A Disc Performance Package for Series 44 Upgrades

By Mike Gordon/DMD

Dual Master Disc Drives on the same GIC (General Interface Channel) will allow your Series 44 customer the added advantage of overlapping I/O. By using the overlapping I/O capability, each master drive can transfer data simultaneously, thereby increasing the number of transaction throughputs up to 20%. The Series 44 can also support up to 16 HP 7925 Disc Drives (1.92 gigabytes of mass storage.)

If your Series 44 upgrade customer wishes to implement dual master disc drives for increased performance, or they require more than 960 megabytes of mass storage, then Disc Memory Division has two solutions. (These solutions assume that your customer has already upgraded their first master drive per the April 15, '81, *Computer News* article entitled "Upgrading your disc drives for a Series 44." For your new Series 44 users, Solution #2 is the only solution available).

Solution #1:

Use an existing 7925S Disc Drive and purchase a second HP 13037C Controller with Option 102 (HP-IB Interface) and 13037U (Rack slide kit) as special products for \$6,125 from DMD. (Remember, specials carry no discount.)

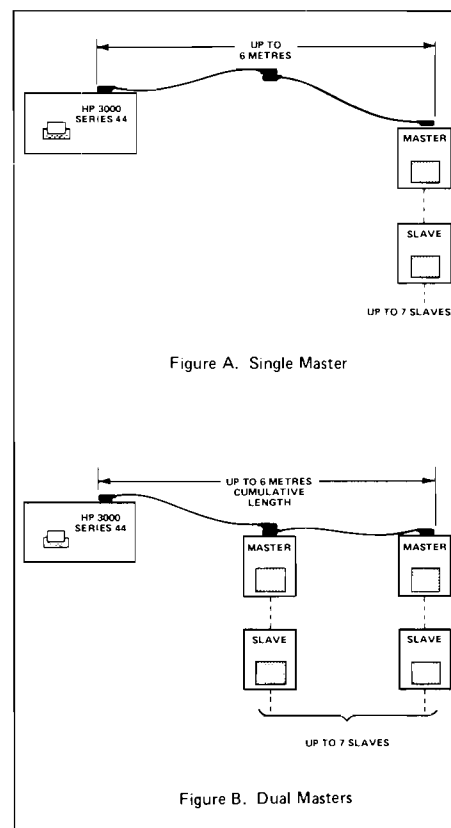
Solution #2:

Purchase a new 7925M with HP-IB Controller;

7925M 120 Mbyte Master Drive	\$22,050
Option 102 HP-IB Interface	1,050
	<hr/> \$23,100

For customers with purchase agreements subtract their appropriate discount on Disc Drive and Controller. As an example, if customer had a 17% discount, subtract

- 3,930



Net price for this example	\$19,170
Subtract (The price for HP-IB Controller)	- 6,125
Effective cost of 120 Mbyte Drive for this example	<hr/> \$13,045

With Solution #2, the above customer receives a \$6,125 HP-IB controller to increase his Series 44 performance and 120 Megabytes of additional storage for only \$13,045.

Configurations:

The standard configuration for an HP 3000 III or earlier system is the single master configuration shown in Figure A. The Series 44 Performance Package with dual master drives is shown in Figure B.

An HP 10833B 2 Meter HP-IB Cable is included with each Master Drive and an optional HP 10833C 4 Meter Cable is available through the new *Computer Supplies Catalog* (5953-2450D).

GLD

Worldwide Floppy Promotion Extended to ICON

By Rosemary Kramer/GLD

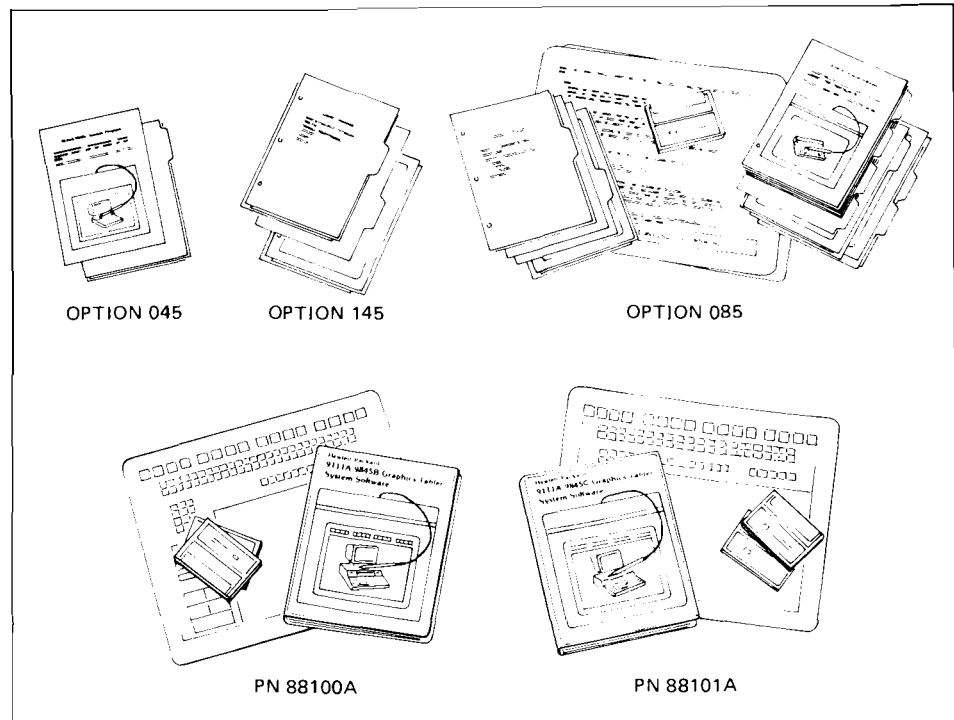
The free Mass Storage ROM/FREE Information Management software incentive will run from June 1 to August 31 in ICON countries.

To help HP ICON dealers and sales representatives prepare for the promotion, Greeley Division has conducted extensive training on the Series 80 Information Management System in Japan, Australia and South Africa.

All orders in ICON countries for a dual-drive, 5-1/4" flexible disc (82901M only) June 1 through August 31 will receive a Mass Storage ROM (00085-15001) and IMPac software (00085-13045) for the local country cost of the 82901M alone. Required ship dates beyond September 11 will not be considered part of the promotion.

ICON completes the worldwide coverage which ended May 15 in the US and winds up in Europe June 30. Results of this campaign will be published in a future issue of *Computer News*.

SDD



Software and documentation are available for the HP 9111A Graphics Tablet used with the HP-85 and 9845B and C.

HP 9111A Software and Documentation Offerings

By Bill Loeber/SDD

On May 1, the San Diego Division acquired marketing responsibility for the HP 9111A Graphics Tablet. We want to emphasize again the software and documentation available for the 9111A on the HP-85 and HP 9845B and C.

No Charge Options:

Option 085

- HP-85/9111A system tutorial (manual insert)
- Utilities software (manual insert)
- Menus
- Tape cartridge with utility program

Option 045

- HP 9845B/9111A system tutorial (manual insert)

Option 145

- HP 9845C/9111A sample programs (manual insert)

Other Software Utilities Available:
9845B/9111A Utilities (P/N 88100A)

- 9845B/9111A software utility manual
- Two menus
- Two tape cartridges with utility programs

9845C/9111A Utilities (P/N 88101A)

- 9845C/9111A software utility manual
- Two menus
- Two tape cartridges with utility programs

P/N 88100A and 88101A each cost \$525.

Demo tapes for the 9111A with the 9845B and 9845C are included with all consignment orders. Contact your SDD/BID/YHP RSE if you have any questions regarding these options or utilities.

HP 7310A Will Become Obsolete in October

By Tom Tremble/SDD

In October '79, San Diego introduced the HP 7310A as a "top-of-the-line" Thermal Graphics Printer. Production costs of a number of critical components have continued to increase beyond our original projections. The increased manufacturing costs have necessitated several price increases. Customers are now turning toward other solutions available from Greeley, Data Terminals, and Vancouver.

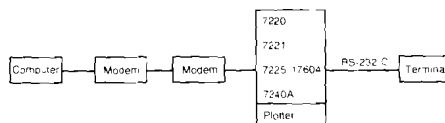
We feel that the price increase necessary to provide reasonable returns cannot be supported in the market place. It is in the best interest of both HP and the customer to discontinue sales of the 7310A, effective October 31, '81. The 7310A was removed from SDD's OEM contract in January, '81. On June 1, '81, it will be removed from the Computer Marketing Group purchase agreements (Exhibit A-1). Until October 31, the current list price (\$5900) will remain unchanged. We will, of course, provide a minimum of five years parts and service support.

It is unfortunate that a quality product such as the 7310A must have such a short life. If discontinuing the 7310A sales creates any special problems for you or your customers, please contact San Diego immediately.

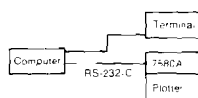
Can the HP 7580A be Used in a Remote Timeshare Environment?

By Chuck Halso/SDD

The HP 7580A was not designed for use where the plotter is isolated from the computer through a modem. Some of San Diego's other plotters have RS-232-C/CCITT V.24 interfaces with "eavesdrop" capability which allow them to be easily connected between a terminal and computer as shown.

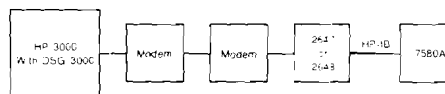


But the 7580A's RS-232C interface is "hardwired" ("single-ended") and cannot be used in the configuration. Rather, it is to be connected to a single port, as shown below.



There are ways in which the 7580A may be remoted through a modem, but due to the difficulty involved in supporting such a configuration, you are best off to avoid trying to make such sales unless your customer is very sophisticated at programming and has very large volume potential.

There is one exception. A future release of DSG/3000 will support the 7580A in the following configuration:



Of course, plotting speed is dependent upon modem transmission rate. Users may find that plot throughput at 300 baud is too slow, whereas 1200 baud and above may be acceptable.

If there is a strong need for an "eavesdrop" RS-232-C interface on the 7580A, please let us know. Your inputs are welcome and encouraged.

VCD

Introducing the HP 2670 Series Printers

By Web Augustine/VCD

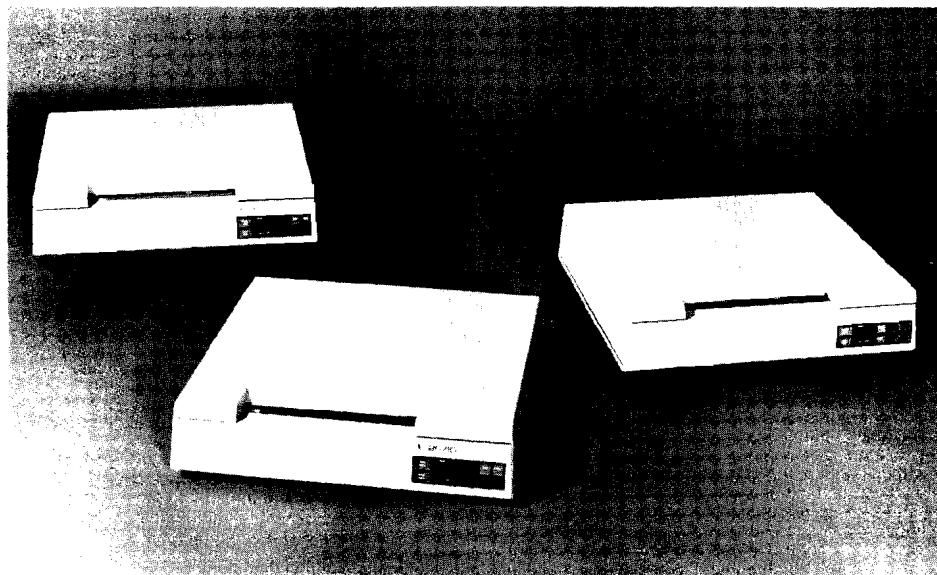
Vancouver proudly announces three new HP 2670 Series thermal printers. Designed to fit a wide range of applications throughout the HP product line, this series includes HP's lowest-cost raster graphics printers. Key features include 120 character per second bi-directional printing, a 9x15 dot matrix character cell, quiet operation, and low maintenance cost. Flat fan-fold paper capability eliminates the curl problem normally associated with roll paper. A fan-fold paper rack is standard with all three printers.

The printers are specifically designed to rest on top of the new HP 9826A Desktop Computer. Other host devices include the HP Series 80 Personal Computers, HP 2640 and 2620 Family Terminals, HP 1000 L-Series Mini-computers, and desktop-based automated test and measurement systems.

The HP 2671A Printer: The entry-level printer for text printing. The 2671A features the full 128 USASCII character set, Roman Extension characters for international use, and Line Drawing characters to create forms. Print modes are normal (10 CPI) and compressed (16.2 CPI). Compressed mode allows up to 132 characters to be printed on a line.

Margins, print mode, primary/secondary character sets, and an underlining character enhancement are selected through simple escape sequences transmitted from the host device. A convenient front panel contains form feed, paper feed, self test and printer reset buttons.

The HP 2671G Graphics Printer: Clean text printing and dot-for-dot graphics copies. The 2671G offers all the features of the 2671A plus high resolution graphics printing of charts, tables, illustrations, graphs, etc. Single



The HP 2670 Series Thermal Printers

keystrokes or convenient binary drivers control the transfer of graphics from HP raster devices to the 2671G. Software routines can be written to copy dot-addressable graphics from non-HP devices. The 2671G is one-third the price of any other HP raster graphics printer.

The 2673A Intelligent Graphics Printer: Sophisticated graphics, full format text printing, and easy-to-use non-volatile configuration. The 2673A offers all the capabilities of the 2671A and 2671G plus many additional user-convenience features. Enhanced graphics capabilities include auto-centering, windowing, and offsets. Margins, tabs, print mode, character sets, page format, and datacomm parameters are selected via an expanded control panel and stored in the printer's non-volatile memory. Once selected, these features come up automatically at printer power-on. Print modes include expanded (5 CPI) in addition to normal and compressed. Enhancements include triple-pass printing, underlining, and character framing. The 2673A features 25 7-bit ISO national character sets in addition to Roman Extension

and Line Drawing character sets. The 2673A includes many of the high-end features found in HP's other raster graphics printers, at a substantially lower price.

HP-IB is the standard interface with all three printers. RS-232C serial and both HP and Centronics-compatible parallel interface options provide convenient interfacing to a broad range of products and systems.

A data sheet (5953-6261), Field Training Manual (02670-90019), 2671A/G User's Manual (02670-90015), 2673A User's Manual (02670-90016), 2671A/G Service Manual (02670-90017), and 2673A Service Manual (02670-90018) are available.

At introduction, the printers will be priced as follows. Check the Corporate Price List and Availability Schedule for full ordering information.

2671A Printer	\$1,095
2671G Graphics Printer	\$1,295
2673A Intelligent Graphics Printer	\$1,895

Demos for the HP 267X

By Bob Weis/VCD

With the arrival of your new 267X printer, don't worry about working up a last-minute demo. Provided with each consignment 267X Series product is:

- Demo tapes which demonstrate the printer features from alphanumeric to graphics. One tape is designed for the 2647A and the other is for the 83/85 Series.
- A file on the 9826 demo disc exists specifically for showing the feature set of the 267X sitting on top of the powerful new desktop.

Vancouver Green Book

By Gary Peck/VCD

Orderable immediately from VCD Sales Development is the new *Vancouver Green Book*. This book contains sections on features, configurations, markets, data sheets, field training manuals, plus an appendix particular to each product family. This book provides an excellent field reference.

To enter your order, send a COMSYS to VCD Sales Development requesting P/N 5955-6405 at \$15 per copy and give us the account number we should use for internal billing. If several of you from the same district or office are interested in receiving a copy, please bundle your orders.

System Support Matrix — Update

By Bill Becker/VCD

With the recent announcement that the 2631B is supported on REMOTE/250, please update your 263X System Support Matrix. See the April 1, '81 issue of *Computer News*, p. 13, 14. Change '81 (6) to Yes (6) on p. 13, and change Note (6) on p. 14 to read: "Please order 2631B Option 250 for all current remote 250 requirements." Also, see the article on page 7 of the same issue entitled "2631B Support on Remote/250."

Computer Groups Price Changes Effective June 1, '81

These prices, effective June 1, '81, will appear on the Corporate Price List on that date, available in your office. Prices are US List unless otherwise noted. Orders at old prices will be honored at the factories for 30 days (or 60 days in the case of government quotes, see exception, III. GSA) after the effective date of an increase. All quotations, either verbal or written, shall be made at the new prices upon the effective date of the new price list. The customer should be notified that his order will be honored at the lower price if it is received within the 30-day grace period. Price decreases are effective immediately and in-house orders shipped 5 working days prior to the announced decrease date will be billed at the new lower price.

Note: Shaded area indicates price decrease.

Product No.	Description	Current Price	New Price
Computer Support Division			
25581S	SSS for HP 2250 Automation Library/1000	\$ 60	\$ 25
25581T	CSS for HP 2250 Automation Library/1000	210	100
25581V	Extended CSS for HP 2250 Automation Library/1000	55	20
25581W	Extended SSS for HP 2250 Automation Library/1000	20	10
Data Systems Division			
92070R	Right-to-copy 92070A	1,050	720

Productivity '81 Will Make Its Last Stop In Seattle



The graphics island drew a lot of interest at the Baltimore show, the fourth of the eight seminars. The final show will be held in Seattle June 10-11.



The field marketing team helped with late night set-up for the Baltimore show. The support of the sales staff helped make the show a success.

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4 JUN 1981

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